

REMARKS

This Preliminary Amendment is prepared in response to the Advisory action of 11 December 2007 (Paper No. 20071128). This Preliminary Amendment is submitted with Request for Continued Examination.

Status of Claims

Claims 32 through 62 are pending in the application.

By this Preliminary Amendment, claims 32, 33 and 36 through 39 have been amended.

As a result of the restriction requirement of 27 January 2006, claims 48 through 62 are currently withdrawn from further consideration. Applicant respectfully traverses this maintenance of this restriction under 35 U.S.C. §121 and 37 CFR §142.

Election/Restrictions

In the Paper No. 051506, the Examiner stated that the Applicant's grounds for traversal for the restriction requirement is not persuasive, and made the requirement final.

In the Paper No. 20070510, the Examiner further stated that "since new claims 48-62 appear to correspond to previously presented claims 17-31, which are previously withdrawn from further consideration as being drawn to the non-elected invention, new claims 48-62 have likewise been withdrawn from further consideration."

Applicant respectfully opposes this restriction requirement for the reasons stated in the previous Response filed on 27 February 2006, which reasons are incorporated into this Amendment by reference thereto.

In addition, it should be noted that the following three patents are in fact classified in both class 271, subclass 3.01 and class 271, subclass 264:

PAT. NO.	Title
1	6,123,328 Conveying belt mechanism for an automatic feeder
2	5,622,365 Sheet feeding method and apparatus

3 5,529,211 Apparatus for conveying, accommodating and paying out
bank notes

Accordingly, withdrawal of the restriction requirement is respectfully requested.

Claim Rejections - 35 U.S.C. § 112

A. Claims 32 through 47 are rejected under the second paragraph of 35 U.S.C. 112 for lack of antecedent basis and for indefiniteness.

In support of this rejection, the Examiner provides the following examples:

Claim 32: the limitation “the leading lower edge” in line 6-7 lacks antecedent basis. This questioned phrase is taken out of context from the entirety of its including clause, “the leading lower edge of a subsequent flexible object. Additionally, Applicant respectfully points to line 5 of claim 32, where antecedent basis may be found in the introductory clause “leading lower edges of the flexible objects ...” that is grammatically correct in number and tense, for the questioned phrase “the leading lower edge” of singular number.

Claim 33: the phrase “comprised of the flexible objects ... is inclined opposite to orientation of the flexible objects when erected” is generally unclear.

Claim 33 is amended to read:

“the flexible objects, during said advance of the flexible objects over the surface of the guide, ~~the flexible objects are being~~ continuously rotated from the ~~orientation~~ orientations of the flexible objects in said obliquely standing position ~~is~~ and inclined opposite to ~~orientation~~ orientations of the flexible objects when erected.”

This amendment removes any lack of clarity, while preserving the definiteness in maintaining the “flexible objects” of the object of the sentence.

Claim 36: the limitation “the rotation of the flexible objects” in lines 1-2 lacks antecedent basis. This rejection appears to be founded upon the objection of the Examining staff to the presence of the article “the” in the phrase “the rotation of the flexible objects.” Applicant has amended claim 36 in order to delete the article “the”, thereby removing the basis for this rejection.

Claim 37: the limitation “said rotation” in line 1 lacks antecedent basis. This rejection appears to be founded upon the objection of the Examining staff to the presence of the article “said” in the phrase “said rotation.” Applicant has amended claim 37 in order to delete the article “said”, thereby removing the basis for this rejection.

Claim 38: the limitation “said rotation” in lines 1 and 2 lacks antecedent basis. This rejection appears to be founded upon the objection of the Examining staff to the presence of the article “said” in the phrase “said rotation.” Applicant has amended claim 38 in order to delete the article “said”, thereby removing the basis for this rejection.

Claim 39: the limitation “said rotation” in lines 1 and 2 lacks antecedent basis. This rejection appears to be founded upon the objection of the Examining staff to the presence of the article “said” in the phrase “said rotation.” Applicant has amended claim 39 in order to delete the article “said”, thereby removing the basis for this rejection.

Claim 44: the limitation “said separation of individual flexible objects or groups of the flexible objects” in lines 1 and 2 lacks antecedent basis. This rejection appears to be founded upon the objection of the Examining staff to the presence of the article “said” in the phrase “said separation.” The Examiner’s attention is respectfully invited to consider line 11 of parent independent claim 32, which reads “accommodating separation” Accordingly, this rejection is unfounded.

Although Applicant has proposed amendments to remove each of the foregoing instances of possible indefiniteness listed in the Office action, Paper No. 20070510, Applicant traverses this rejection for the following reasons.

First, the first sentence of the second paragraph of 35 U.S.C. 112 requires only that claims “set out and circumscribe a particular area with a reasonable degree of precision and particularity.” (*Emphasis added*) *In re Miller*, 442 F.2d 689, 692 (CCPA 1971), *quoting In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991), *cert. denied*, 112 S.Ct. 169 (1991). Moreover, and as is explained by the *Manual*, “**the failure to provide explicit antecedent basis for terms does not always render a claim indefinite**. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite.” MPEP §2173.05(e)..; *see Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992); *see also In re Moore*, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971) (“[T]he definiteness of the language employed must be analyzed-not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.”) (*emphasis added*) *Bose Corp. v. JBL Inc.*, 274 F.3d 1354, 61 USPQ2d 1216, 1218 (Fed. Cir. 2001).

Second, the Office action presents form paragraph 7.34.05 in explanation of the averment of a lack of antecedent basis. With respect to the form paragraph 7.34.05, MPEP §706.03(d) states that “[t]his form paragraph should **ONLY be used in aggravated situations** where the lack of antecedent basis makes the scope of the claim indeterminate” (*emphasis added*). MPEP §706.03(d).

Applicant notes with appreciation the Examiner’s care in reviewing the text of the foregoing pending claims.

Claim Rejections - 35 U.S.C. § 102

- B. Claims 32-33, 37, 39-47 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,180,259 to Bewersdorf et al.**

Claims 32, 33, 37 and 39 through 47 are rejected under 35 U.S.C. §102(b) as being possibly anticipated by U.S. Patent No. 4,180,259 issued to Bewersdorf et al. In support of this rejection, the Examiner writes that:

“Regarding claim 32, as best understood, Figs. 5-7 disclose a method for processing and separating flexible, flat objects during product feed, comprised of:

continuously feeding flexible objects (LM) to a transfer module (Fig. 6) in an essentially regular imbricate formation as the flexible objects (LM) fluently advance along a guide (41) within the transfer module (Fig. 6) with leading lower edges of the flexible objects supported on a surface of the guide (41) and with a trailing edge of each flexible object (LM) lying over the leading lower edge of a subsequent flexible object (LM) (See e.g., Fig. 5 for the orientation of the flexible objects);

erecting the flexible objects (LM) during the product feed along the guide (41) into obliquely standing positions with leading upper edges of the flexible objects (LM) exhibiting inclinations opposite to orientations of the flexible objects (LM) when initially erected (see e.g., Fig. 6 for orientation of flexible objects during feed); and

accommodating separation of the flexible objects (LM) from the obliquely standing positions with leading upper edges of the flexible objects (LM) exhibiting inclinations opposite to orientations of the flexible objects (LM) when erected, in a defined number from the flexible objects (LM) remaining supported by the guide (41), and conveyance away (Figs. 6-7) from the transfer module (Fig. 6) by a conveyor (including 44) (see e.g., Fig. 6 for orientation of flexible objects during separation).

Regarding claim 33, as best understood, Figs. 5-6 disclose comprised of the flexible objects (LM) during the advance of the flexible objects (LM) over the surface of the guide (41) the flexible objects (LM) are continuously rotated from the orientation of the flexible objects (LM) in the obliquely standing position is inclined opposite to orientation of the flexible objects (LM) when erected.

Regarding claim 37, as best understood, Figs. 5-6 disclose comprised of contributing to the rotation by sequentially urging upper edges of the flexible objects (LM) in a direction of the advance.

Regarding claim 39, as best understood, Figs. 5-6 disclose comprised of contributing to the rotation by terminating the guide (41) with an abutment (including 42) oriented outwardly from the guide (41) in a direction of the advance.

Regarding claim 40, Figs. 5-6 disclose that a surface of the guide (41) comprises at least two sections with different surface inclinations.

Regarding claim 41, Figs. 5-6 disclose the guide (41) having a downward inclination along a direction of the advance of more than 30'.

Regarding claim 42, as best understood, Figs. 3 and 5-6 disclose that the guide (41) comprises guide elements (200) providing regional acceleration and braking of the flexible objects (LM).

Regarding claim 43, Figs. 3 and 6 disclose the transfer module (Fig. 6) having an abutment (including 190) adjustably positionable relative to the guide (41).

Regarding claim 44, Figs. 5-6 disclose a separator (including 56 and 44) disposed in proximity to the guide (41) to make the separation of individual flexible objects (LM) or groups of the flexible objects (LM).

Regarding claim 45, Figs. 3 and 6 disclose the transfer module (Fig. 6) comprising a plurality of movable elements (200) conveying the flexible objects (LM) in a direction of the advance.

Regarding claim 46, Figs. 3 and 6 disclose the transfer module (Fig. 6) comprising a transverse shift (including 198) disposed to transversely displace the flexible objects (LM) obliquely standing within a terminal portion of the guide (41).

Regarding claim 47, Figs. 5-6 and 9-10 disclose a retainer (including 88 and 76) disposed above the guide (41) to act upon free edges of the objects (LM). See e.g., Fig. 6, for device acting on free edges of the objects."

Applicant traverses this rejection for the following reasons.

First, the foregoing excerpt drawn from Paper No. 20070510 does not appear in the text of Bewersdorf '259, and appears to have been lifted verbatim from the text of Applicant's pending claims. Bewersdorf '259 can not be read as anticipating Applicant's claims under 35 U.S.C. §102(b) when Bewersdorf '259 neither teaches nor suggests Applicant's "continuously feeding ... in an essentially regular imbricate formation as the objects fluently advance along a guide ..." and "erecting the flexible objects ... into obliquely standing positions with leading upper edges ... exhibiting inclinations opposite to orientations. As explained succinctly by Bewersdorf '259,

"the signatures are stacked in the supply hopper 30 with the lap margin LM uppermost and facing the stop plate 42. The backbone BK is *always* in **leading position** and in order that the stream movement can be readily visualized the signatures are numbered in FIGS. 5, 6 and 7."¹

Consequently, Applicant's:

"continuously feeding flexible objects to a transfer module in an essentially regular imbricate formation as the flexible objects fluently advance along a guide within said transfer module with **leading lower edges of the flexible objects supported on a surface of the guide** and with a trailing edge of each flexible object lying over the leading lower edge of a subsequent flexible object;

erecting the flexible objects during said product feed along the guide into *obliquely standing positions with leading upper edges of the flexible objects exhibiting inclinations opposite* to orientations of the flexible objects when initially erected; and

accommodating separation of the flexible objects from the obliquely standing positions **with leading upper edges of the flexible objects exhibiting inclinations opposite** to orientations of the flexible objects when erected ...",

can not be said to have been anticipated by Bewersdorf '259 unless the express teachings of Bewersdorf '259 are ignored. Moreover, there is no indication that the intended mode of

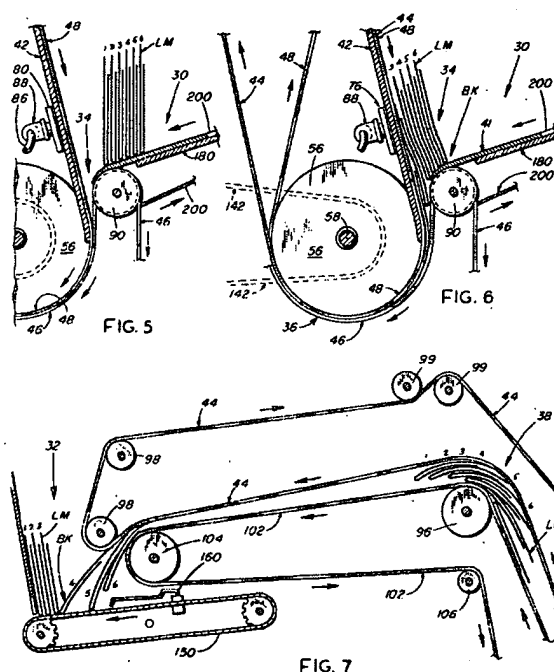
¹

Bewersdorf '259, column 5, lines 67 and 68, and column 6, lines 1-3.

operation of Bewersdorf '259 could be modified. Accordingly, this rejection of claims 32, 33, 37 and 39 through 47 may not be sustained. Such action is respectfully urged.

Second, nothing in Bewersdorf '259 suggests Applicant's "continuously feeding flexible objects ... objects *advance* along a guide ... with the leading lower edges ... supported on a surface of the guide" in combination with Applicant's "erecting the flexible objects *during* said product feed *along* the guide" In contradistinction, Bewersdorf '259 shows signatures fed through his first riffle bend 36 around wheel 56 and second riffle bend (un-numbered) around wheel 96 with the leading edges of the signatures being "turned approximately 180°"² and raised "during their elevated travel from wheel 56 upward to wheel 96";³ consequently, the leading edges of the signatures are uppermost.

Third, this rejection of claims 32, 33, 37 and 39 to 47 as anticipated by Bewersdorf, *et al.* '259, is primarily based on Figures 5 to 7, which Paper No. 20070510 avers disclose a method according to Applicant's claim 32.



² Bewersdorf '259, column 5, line 4.

³ Bewersdorf '259, column 5, line 55 and 56.

Bewersdorf, *et al.* '259 states the following in explanation of his accompanying Figures 5 through 7:

"The machine of the present invention is adapted to transfer signatures from a supply station 30, Fig. 1B, to a delivery station 31 characterized by a hopper 32, Fig. 1A. The signatures will be stacked on edge at the supply station as shown in Fig. 5. The signatures are extracted one by one at the supply station and are fed *in overlapped relation* (Fig. 6) through a gate 34, Fig. 5. Shortly after being extracted and moved through the gate, the overlapped signatures are turned around a first riffle bend 36, Fig. 6, and are then elevated in overlapped relation, by means of transfer belts, to a second riffle bend 38, Fig. 7."

In explaining his use of the term "*Gating the signatures*" Bewersdorf however, teaches that:

"The gate 34 at the front of the supply station 30, Fig. 1B, is defined by the separation between a downwardly inclined guide plate 41 and a substantially upright stop plate 42. The signatures to be fed through the gate are stacked in the supply station edgewise with the backbone, BK (the fold in the signature) downward, as shown in Fig. 6. Usually, signatures are folded off-center resulting in an extended edge known as the "lap margin", identified by reference character LM, Fig. 6. This aids in following the path of the signatures as will be seen."

This process when practiced in conformance with the teachings of Bewersdorf '259 can only be considered as anticipating the novelty for Applicant's claim 32 if Applicant's claim 32 is read so as to ignore Applicant's step of "accommodating separations" Applicant submits that this difference alone should be sufficient to establish novelty over Bewersdorf '259.

Moreover, Paper No. 20070510 when advocating that Bewersdorf '259 teaches Applicant's "accommodating separation ..." that,

“accommodating separation of the flexible objects (LM) from the obliquely standing positions with leading upper edges of the flexible objects (LM) exhibiting inclinations opposite to orientations of the flexible objects (LM) when erected, in a defined number from the flexible objects (LM) remaining supported by the guide (41), and conveyance away (Figs. 6-7) from the transfer module (Fig. 6) by a conveyor (including 44) (see e.g., Fig. 6 for orientation of flexible objects during separation).”

but when averring that Bewersdorf '259 teaches Applicant's “continuously feeding ...” step, that:

“continuously feeding flexible objects (LM) to a transfer module (Fig. 6) in an essentially regular imbricate formation as the flexible objects (LM) fluently advance along a guide (41) within the transfer module (Fig. 6) with leading lower edges of the flexible objects supported on a surface of the guide (41) and with a trailing edge of each flexible object (LM) lying over the leading lower edge of a subsequent flexible object (LM) (See e.g., Fig. 5 for the orientation of the flexible objects).”

This is inaccurate and is not faithful to the language of Applicant's claims. Either the entirety of the assembly including “inclined guide plate 41” is a part of Applicant's “guide” or “inclined guide plate 41” of Bewersdorf '259 along constitutes the entirety of Applicant's “guide”; in the latter instance, the remainder of Applicant's claim 32 is not met. In the former instance, if Bewersdorf '259 is read as teaching the entirety of its assembly (including “inclined guide plate 41”) anticipates Applicant's “guide”, the “feed belt 44” of Bewersdorf '259 contributes nothing to Applicant's “accommodating separation ... and conveyance away from the transfer module by a conveyor”, because “feed belt 44” cannot be said to anticipate both Applicant's “guide” and “a conveyor” able to remove the objects “supported by the guide.”

As taught by **MPEP §2131**, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”⁴ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*,

⁴

Manual of Patent Examining Procedure, §2131, 8th Edition, Rev. 6 (September 2007).

"All words in a claim must be considered in judging the patentability of that claim against the prior art."⁵

Furthermore, Applicant's original specification clearly teaches that the object of the invention lies in providing a method and a device for the continuous processing of an imbricate formation of flexible flat objects, and expressly instructs one seeking to practice the process defined by the rejected claims that, for specifically printed products, in particular for the exact separation and transfer of *individual printed products* from this imbricate formation to a conveying member, which demand a comparatively low design, control and regulation expense with regard to technology, Bewersdorf '259 does neither teach nor suggest a separation of the objects to be processed in the sense of an exact separation and transfer of *individual printed products*, or alternatively, and in conformance with the language of claim 32, *in a defined number*.

However, in order to expedite the prosecution of this application and more clearly recite the unique features of the present invention, independent claim 32 is amended.

The first limitation added to claim 32 more clearly claims the patentably distinguishable feature in which the erection procedure of the flexible objects is actively supported. This is performed in that the lower edges of the flexible, flat objects are specifically accelerated first and specifically decelerated thereafter in a controlled manner. The acceleration is achieved by means of conveyor belts 15.2 running at a higher speed than further conveyor belts 15.3 located downstream of the conveyor belts 15.2. The further conveyor belts 15.3 decelerate the lower edges of the flexible, flat objects such that the emerging moment of tilt is utilized on purpose for erecting and pivoting/inclining the flexible, flat objects. This feature is supported by the description in paragraph 43 of US 2004/0084830 A1 (see excerpt below) as well as by the figures 2 and 3 thereof.

⁵ Manual of Patent Examining Procedure, §2143.03, 8th Edition, Rev. 6 (September 2007), citing *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970).

[0043] FIG. 3 by way of arrows 16.1, 16.2, 16.3 schematically shows the influence of three conveyor belts 15.1, 15.2, 15.3 on the printed products 10 of the imbricate formation 13. The length of the arrows 16.1, 16.2, 16.3 by way of example illustrate the speed of the conveyor belts 15. As the arrows 16.1, 16.2 illustrate the conveyor belts 15.1, 15.2, 15.3 here are driven in the flow direction of the imbricate formation 13, wherein the second conveyor belt 15.2 has a higher speed 16.2 than the two other conveyor belts 15.1 and 15.3. By way of this, it is achieved that the printed products 10 in this region are accelerated at the cut-edge side in the direction of the brim 3. After the printed products 10 have left the active region of the second conveyor belt 15.2, they get into the active region of the third conveyor belt 15.3 where the printed product are braked at the cut-edge side. By way of this procedure, it is achieved that the printed products 10 are erected in a controlled manner. Other embodiment forms and drive concepts are also possible according to requirement. The conveyor belts 15 may be driven differently or regulated or controlled and different friction forces with respect to the conveyor belts 15 or guide sheet [metal] 2 may additionally influence the product flow.

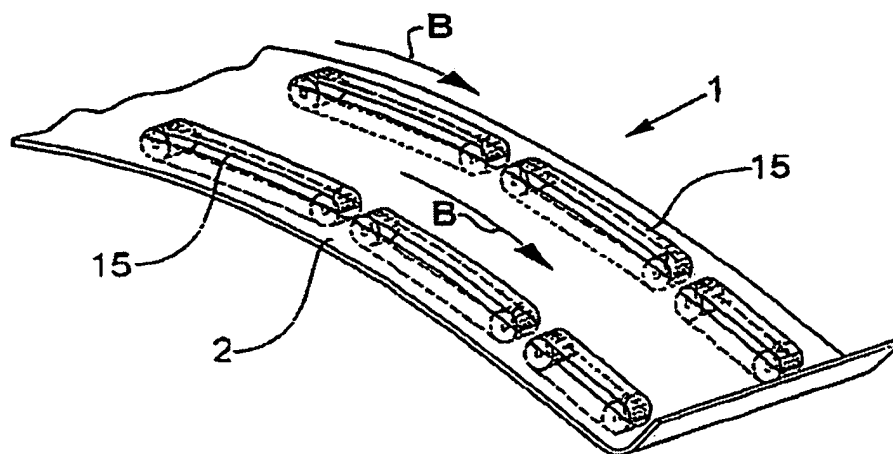


FIG. 2

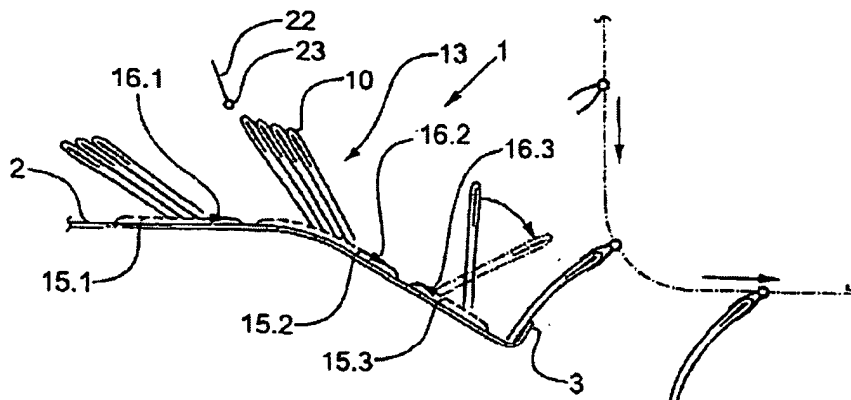


FIG. 3

Further, the general concept of separating the flexible objects is more precisely recited in independent claim 32. The last subsection of claim 32 now recites that the conveyance away from the transfer module is performed by a gripper 8 of a gripper conveyor. Each gripper is dedicated to grip a separated flexible, flat object or a predefined number thereof. Support for this feature is provided by the description in paragraph 39 on page 5 of US 2004/0084830 A1 (see excerpt below) as well as by all figures.

isolated from one another in the region of the fold. The printed products 10 separated from one another in the region of the fold 11 individually or in a defined number are brought into the active region of grippers 8, are gripped by one of these grippers 8 and subsequently conveyed away. It

Therefore, independent claim 32, for the numerous reasons discussed above patentably distinguishes over the prior art of record. Therefore, withdrawal of the rejection of Claims 32-33, 37, 39-47 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,180,259 to Bewersdorf et al. is respectfully requested.

Conclusion

A fee of \$1,270.00 for **Large Entity** is incurred by the submission of the Request for Continued Examination (RCE) (\$810.00) and the Petition for two-month Extension of Time (\$460.00). Should the other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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